

(Caption of Case)

Lockhart Power's 2019 Meter Sampling Test Report

284036

BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA

## COVER SHEET

DOCKET

NUMBER: 2006 - 63 - E

(Please type or print)

Submitted by: Lockhart Power Company

SC Bar Number:

Address: P.O. Box 10

Telephone:

Lockhart, SC 29364

Fax:

Other:

Email:

**RECEIVED**  
APR 08 2019  
PSC SC  
MAIL / DMS

NOTE: The cover sheet and information contained herein neither replaces nor supplements the filing and service of pleadings or other papers as required by law. This form is required for use by the Public Service Commission of South Carolina for the purpose of docketing and must be filled out completely.

**DOCKETING INFORMATION** (Check all that apply)
☐ Emergency Relief demanded in petition
 ☐ Request for item to be placed on Commission's Agenda expeditiously

☐ Other:

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)			
<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Affidavit	<input type="checkbox"/> Letter	<input type="checkbox"/> Request	
<input type="checkbox"/> Electric/Gas	<input type="checkbox"/> Agreement	<input type="checkbox"/> Memorandum	<input type="checkbox"/> Request for Certification	
<input type="checkbox"/> Electric/Telecommunications	<input type="checkbox"/> Answer	<input type="checkbox"/> Motion	<input type="checkbox"/> Request for Investigation	
<input type="checkbox"/> Electric/Water	<input type="checkbox"/> Appellate Review	<input type="checkbox"/> Objection	<input type="checkbox"/> Resale Agreement	
<input type="checkbox"/> Electric/Water/Telecom.	<input type="checkbox"/> Application	<input type="checkbox"/> Petition	<input type="checkbox"/> Resale Amendment	
<input type="checkbox"/> Electric/Water/Sewer	<input type="checkbox"/> Brief	<input type="checkbox"/> Petition for Reconsideration	<input type="checkbox"/> Reservation Letter	
<input type="checkbox"/> Gas	<input type="checkbox"/> Certificate	<input type="checkbox"/> Petition for Rulemaking	<input type="checkbox"/> Response	
<input type="checkbox"/> Railroad	<input type="checkbox"/> Comments	<input type="checkbox"/> Petition for Rule to Show Cause	<input type="checkbox"/> Response to Discovery	
<input type="checkbox"/> Sewer	<input type="checkbox"/> Complaint	<input type="checkbox"/> Petition to Intervene	<input type="checkbox"/> Return to Petition	
<input type="checkbox"/> Telecommunications	<input type="checkbox"/> Consent Order	<input type="checkbox"/> Petition to Intervene Out of Time	<input type="checkbox"/> Stipulation	
<input type="checkbox"/> Transportation	<input type="checkbox"/> Discovery	<input type="checkbox"/> Prefiled Testimony	<input type="checkbox"/> Subpoena	
<input type="checkbox"/> Water	<input type="checkbox"/> Exhibit	<input type="checkbox"/> Promotion	<input type="checkbox"/> Tariff	
<input type="checkbox"/> Water/Sewer	<input type="checkbox"/> Expedited Consideration	<input type="checkbox"/> Proposed Order	<input type="checkbox"/> Other:	
<input type="checkbox"/> Administrative Matter	<input type="checkbox"/> Interconnection Agreement	<input type="checkbox"/> Protest		
<input type="checkbox"/> Other:	<input type="checkbox"/> Interconnection Amendment	<input type="checkbox"/> Publisher's Affidavit		
	<input type="checkbox"/> Late-Filed Exhibit	<input checked="" type="checkbox"/> Report		



April 3, 2019

The Honorable Jocelyn G. Boyd  
Chief Clerk and Administrator  
South Carolina Public Service Commission  
101 Executive Center Drive  
Suite 100  
Columbia, South Carolina 29210

Docket No. 2006-63-E  
Order No. 2009-85

Dear Mrs. Boyd:

Pursuant to Docket No. 2006-63-E, Order No 2009-85 dated February 17, 2009 Lockhart Power Company is submitting the 2019 Meter Sampling Test Report. The results meet the acceptability criterion based on the Commission approved Meter Sampling Plan.

Sincerely,

A handwritten signature in black ink that reads "James H. Seay, Jr." with a stylized flourish at the end.

James H. Seay, Jr.  
Manager, Engineering & Regulatory Affairs  
Lockhart Power Company

**Lockhart Power Company**  
**Results from 2019 Statistical Sampling Program for Self-Contained Meters**  
**Statistical sampling and analysis were performed per the American National Standard ANSI/ASQ Z1.9-2003**

Report Date:	3/27/2019
Description	Single Phase Elester Meters
Population	6,183

<b>Results</b>	<b>2019 Results</b>
# Meters Tested:	15
Bar-X (Mean):	100.1786667
Standard Deviation:	0.56
Max. Allowable % nonconforming (M)	4.32%
Est. % nonconforming (Pu)	0.00%
Est. % nonconforming (PI)	0.00%

**The lot meets acceptability criterion since Pu is less than M :Upper limit 0%<4.32%**

**The lot meets acceptability criterion since PI is less than M: Lower limit 0%<4.32%**

**Lockhart Power Company**  
**2019 Statistical Sampling Program for Self-Contained Meters**  
**Statistical sampling and analysis were performed per the American National Standard ANSI/ASQ Z1.9-2003**  
**Sampling Procedures for Inspection by Variables For Percent Nonconforming**  
**Variability Unknown Standard Deviation Method with Single Specification Limit**

Meters Test Results													
X	X^2	Correction Factor	SS	Variance	SD	Xbar	U	L	Qu	Ql	Pu	Pl	M
100	10000	150,536.48	4.40	0.31	0.56	100.18	102.00	98.00	3.25	3.89	0.00%	0.00%	4.32%
100.1	10020.01												
100.2	10040.04												
100.3	10060.09												
100.6	10120.36												
100.6	10120.36												
100.7	10140.49												
100.7	10140.49												
100.8	10160.64												
100.8	10160.64												
99.9	9980.01												
99.9	9980.01												
99.7	9940.09												
99.6	9920.16												
<u>98.78</u>	<u>9757.4884</u>												
1,502.68	150,540.88												

The lot meets acceptability criterion since Pu is less than M :Upper limit 0%<4.32%  
The lot meets acceptability criterion since Pl is less than M: Lower limit 0%<4.32%

Analysis is based on the following assumption:  
Level 1 Inspection  
AQL = 1%  
Form 2  
Reduced Inspection

## **Lockhart Power Company**

### **Meter Sampling Plan for Single-Phase Watt-Hour Meters**

1. The procedure for the sampling plan will be Variability Unknown-Standard Deviation Method for a Single Specification Limit. An Inspection Level I, reduced inspection, with AQL=1% is to be used. This is based on the ANSI standard Z1.9-2003.
2. Samples of self-contained, single-phase watt-hour meters shall be tested on an annual basis. The samples will be drawn from the entire population of the same meter type.
3. The sampling rate (K) shall be computed by dividing the total number of meters (N) by the number in the sample (n). Thus  $K = N/n$ . The sample (n) shall be drawn from the meter history records by first selecting, from tables of random numbers, a random number between 1 and K, then drawing the meter which occupies this position, and then drawing every Kth meter thereafter.
4. The number of meters in each sample shall be selected annually by the company consistent with criteria established in the *ANSI standard Z1.9-2003*. If the group fails to meet the criteria in *ANSI standard Z1.9-2003* then a new sample will be drawn for normal inspection and tested separate from the sample that failed. If this sample fails then the entire group will be recalibrated at a minimum rate of 5% per year until all of the meters in that group have been recalibrated or until succeeding annual samples show that the performance criteria have been met. Meters to be recalibrated shall be selected on the basis of the longest time since last test. Meters so tested and placed into service shall be sampled as a separate group from the remainder of the original group not tested. When the sample results of the remainder of the original group indicate that the group meets the performance criteria, the components of the group may be consolidated for subsequent sampling.
5. A report shall be made annually to the South Carolina Public Service Commission and Office of Regulatory Staff showing results and any action taken.